## AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [55] with the following amended paragraph.

FIG. 9 is a cross-sectional view of the exemplary sample cell 180 taken substantially along line 9-9 of FIG. 8. A flow of gas through passages within sample cell body 188 and sample cell core 189 are indicated by arrows ~~A~~198 and 199. More specifically, gas enters the sample cell after passing through the sampling tubing and an optional filter device to remove fluids before entering the sample cell, as indicated by arrow 199. After the gas passes through a passage within inlet port 184, it enters the passage located within the sample cell core 189. Within sample cell core 189, the gas enters a sample chamber 196 via an inlet 194 adjacent to a window 200 at one end of the sample chamber and exits via an outlet 192 adjacent to a window ~~200~~ 202 at the opposite end of sample cell chamber 196. Sample cell chamber 196 is the portion of the passage in which radiation passes through, and it is the infrared reflectivity of this chambers interior surfaces that enhances the signal received by the infrared detectors.

Please replace paragraph [56] with the following amended paragraph.

Sample chamber 196 in a preferred embodiment has a cylindrical design, with the inlet and outlet positioned at opposite ends of the sample chamber as close to the windows as possible to permit the sample gas to cleanly pass through the sample cell without crevices and other "unswept" volumes (sometimes referred to as "deadspace"). To enhance the infrared reflectively, sample cell core 189 may be molded from a high index material or sample cell chamber 196 may be plated with a material that is highly reflective at NIR wavelengths. After passing out of sample cell core 189, the gas exits sample cell 180 after passing through the passage within outlet 182, as indicated by arrow 198. The sample cell core is preferably located in the central portion of the sample cell and provides a passage for the gas sample between the

symmetrical inlet and outlet passages in the body. The optical path of sample cell 180 does not simply transverse the flow path, but is parallel with the flow path for a substantial portion of the path length. To achieve this alternative flow path and minimize the disturbance to the flow profile, a flow passage shape referred to as the "Z" configuration, is used in this exemplary sample cell. This configuration also allows for the uniform flow passage from outside the sample cell, into the sample cell body and sample cell core without unnecessary transitions and the resultant turbulence.